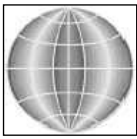


## EM CAREER PATH (SW)



Electrician's Mate perform corrective and preventive maintenance on power and lighting circuits, electrical fixtures, motors, generators, voltage and frequency regulators, controllers, distribution switchboards, galley and laundry equipment.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ShORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
27-30	EMCM	23 Yrs	CMC, Brig, Senior Enl Academy (Instructor)	36	4 <sup>th</sup> Shore Tour Billet: CMC, Dir. Of Training, CNE staff advisor. Duty: Schoolhouse, ATG, IMA/F. Qualification: MTS, ATS, SEA.
23-27	EMCM EMCS	23 Yrs 18	CMC, CSC	48	4 <sup>th</sup> Sea Tour Billet: CMC, DLCPO, LCPO, 3MC. Duty: Ship/Squadron/Battalion. Qualification: SW, AW, SCW, EXW, ETT, DCTT, 3MTT, SEA, EDO/EOOW, 3MC.
20-23	EMCM EMCS EMC	23 Yrs 18 13.5	CWO, CMC, CSC, Brig	36	3 <sup>rd</sup> Shore Tour Billet: CMC, LCPO, Instructor, RDC. Duty: Schoolhouse, ATG, IMA/F. Recruiting, RMC. Qualification: MTS, ATS, SEA, Instructor.
17-20	EMCS EMC EM1	18 Yrs 13.5 9.7	LDO, CWO, OCS, MECP, CSC, DAPA, EOA, USS CONSTITUTION, Brig	48	3 <sup>rd</sup> Sea Tour Billet: LPO, DLCPO, LCPO, 3MC. Duty: Ship or Squadron/Battalion. Qualification: SW, AW, SCW, EXW, ETT, DCTT, 3MTT, "C" / "D" School, EDO/EOOW, 3MC.
14-17	EMC EM1	13.5 Yrs 9.7		36	2 <sup>nd</sup> Shore Tour Billet: LCPO/LPO, Instructor, RDC, Recruiter. Duty: Schoolhouse, RTC, ATG, IMA/F, Recruiting. Qualification: MTS, ATS, EM "C"/"D" School, SEA, Instructor.
9-14	EM1 EM2	9.7 Yrs 4.5		60	2 <sup>nd</sup> Sea Tour Billet: WCS, LPO, 3MC. Duty: Ship or Squadron/Battalion. Qualification: SW, AW, SCW, EXW, ETT, DCTT, "C"/ "D" school, EDO/EOOW.
YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ShORE FLOW	TYPICAL CAREER PATH DEVELOPMENT



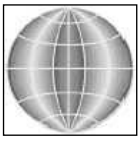
## EM CAREER PATH (SW)



YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ShORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
6-9	EM1 EM2 EM3	9.7 Yrs 4.5 2	STA-21, OCS, MECP, Naval Academy, USS CONSTITUTION, DAPA	36	1 <sup>st</sup> Shore Tour Billet: RDC, Recruiting, Instruct. Duty: Schoolhouse, RTC, ATG, IMA/F, Recruiting. Qualification: MTS, "C" or "D" School, Instructor.
2-6	EM2 EM3	4.5 Yrs 2	NROTC	60	1 <sup>st</sup> Sea Tour Billet: WCS, Operator/Maintenance Tech. Duty: Ship or Squadron/Battalion. Qualification: Repair EM, SW, AW, EPCC, SCW, EXW, ETT.
1+/-	EM3, EMFN EMFA Accession Training	9 Months			Recruit Training and all schools or training events are required to be completed prior to reporting to their first operational command.
YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ShORE FLOW	TYPICAL CAREER PATH DEVELOPMENT

### Notes:

1. EM is a sea intensive rating (refer to Sea/Shore Flow front page). EMs are not required to hold a security clearance; however, there may be certain billets that require a clearance.
2. In rating shore duty is limited and is normally "A" or "C" school instructors, ATG, RMCs/IMFs. Many Sailors can expect a tour as a Recruiter or Recruit Division Commander (RDC).
3. Tours at NPC and BUPERS require screening.
4. EMC/EMCSs on ships that are eligible are encouraged to qualify EOOW.
5. Advancement to EMCM requires citizenship and access to classified information prior to meeting advancement eligibility, per BUPERSINST 1430.16F.
6. NEC information:
  - a. 4615 - Electrical Motor Rewinder rewinds AC and DC motor and generator stators, rotors, field coils, and armatures utilizing round wire or formed coils. Takes rewinding data, replaces brushes, adjusts brush rigging, dips, bakes, renews bearings, assembles, and test runs.
  - b. 4626 - LHD-1 Electrical Component Maintenance Technician performs operational, preventive and corrective maintenance on LHD-1 unique electrical components, 400HZ Static Frequency Converters and the SSM Degaussing System.
  - c. 4632 - FFG-7 Class Auxiliaries Electrical System Technician operates and performs corrective and preventive maintenance at the organizational level on auxiliary electrical systems installed on FFG-7 Class ships.



## EM CAREER PATH (SW)



d. 4651 - Navy Afloat Maintenance Training Strategy (NAMTS) performs Outside Electrical Repair intermediate-level electrical maintenance procedures on various shipboard equipment and systems in support of Fleet-directed requirements. Demonstrates knowledge of intermediate-level repair procedures, repair and maintenance standards, quality assurance specifications, and proper use of IMA industrial machinery. Award of this NEC is based on documented completion of Fleet-specified tasks for this skill and demonstration of advanced-level proficiency during hands-on training and production work as specified in the current Job Qualification Requirement (JQR) located at <https://www.portal.navy.mil/crmc/NAMTS/>. Training is led by journeyman-level craftsmen and supplemented by appropriate self-paced instruction consistent with Department of Labor journeyman certification.

e. 4666 - Minesweeping Electrician operates, tests, adjusts, and performs organizational level maintenance on automatic degaussing equipment and all specialized electrical equipment involved in magnetic and acoustic mine sweeping. Uses tools, meters, and special test equipment necessary to correctly test, align, troubleshoot, and repair electrical and electronic components of the automatic degaussing and mine sweeping equipment. Sets up the equipment to conform to various operational orders.

f. 4668 - UNREP Electrical-Electronics Control Maintenance performs organizational level maintenance on electro hydraulic power and electronic controls associated with UNREP systems. Repairs circuits and control devices and perform systems test on UNREP systems.

g. 4671 - Shipboard Elevator Electronic/Electrical System Maintenance Technician tests inspects and performs organizational level maintenance on shipboard weapons and cargo handling elevators on a system and component level. Troubleshoots and repairs electronic/electrical systems and equipment, such as controllers, sensors, switches, and the electrical components of hydraulic/mechanical interfaces. Coordinates efforts with operators and maintainers of other ratings using or servicing the systems.

h. 4672 - Steam Catapult Electrician performs organizational level maintenance on catapult and arresting gear systems, including synchros, repeaters, 110/220/440V electrical systems, contacts, relays, micro switches, series and parallel switches, pressure and temperature sensing switches, torque and gear limit switches, chronograph, and control console electrical functions. Reads and interprets electrical/mechanical drawings.

i. 4673 - LAMPS MK III RAST/HRS Electrical Maintenceman performs maintenance on RAST system components. Repairs failed electrical and electronic components by removal and replacement to the lowest replaceable unit (LRU).

j. 4675 - Physical/Dimensional Calibration Specialist performs third echelon (MIRCS, FMCL, NCL) level duties involving physical, mechanical, plane and angular measurements and calibration, including flow and temperature measurement and calibration. Aligns, inspects, repairs, troubleshoots, modifies, and calibrates electro/mechanical test and monitoring systems (TAMS) using calibration and working standards.

k. 4685 - LSD-41/49 Class Advanced Engineering Control System (AECS-MCS) Maintenance Technician performs organizational level preventive and corrective maintenance, troubleshooting and fault isolation procedures on the Advanced Engineering Control System (AECS) onboard upgraded LSD 41/49 Class Ships. Training for the AECS includes: Machinery Control System (MCS), Local Area Network (LAN), Diagnostic Expert Test Engineering Reasoner (DEXTER), On-Board Trainer (OBT), and Ship Control System (SCS).